

## Recombinant Human SERPINH1 (Hsp47)

### ORDERING INFORMATION

Catalog Number	Size
11125P-10	10ug
11125P-50	50ug
11125P-1000	1000ug

**Formulation:** Sterile-filtered colorless solution (1mg/ml) in 20mM Tris-HCl, pH 8.0, and 10% glycerol. Purified by proprietary chromatographic techniques.

### BACKGROUND

SERPINH1 is a member of the serpin superfamily of serine proteinase inhibitors whose expression is induced by heat shock. As a molecular chaperone, it localizes to the endoplasmic reticulum lumen and binds collagen, thus participating in the maturation of collagen molecules, facilitating the folding and assembly of procollagen molecules, retaining unfolded molecules within the ER, and assisting in the transport of correctly folded molecules from the ER to the Golgi apparatus. Autoantibodies to SERPINH1 have been found in cases of rheumatoid arthritis.

### DESCRIPTION

Recombinant human SERPINH1 produced in *E. coli* is a single, non-glycosylated polypeptide containing 439 amino acids (aa 18-417) with a molecular weight of 48.9kDa. It is fused to a 37- amino acid His-tag at the N-terminus.

### SPECIFICATION SUMMARY

**Source:** *Escherichia coli*

**Purity:** Greater than 90% as determined by SDS-PAGE.

**Accession number:** P50454

**Amino acid sequence:**

**RGSHHHHHH GMASMTGGQQ MGRDLYDDDD**  
**KDRWGS**HMAA EVKKPAAAAA PGTAEKLSPK  
 AATLAERSAG LAFSLYQAMA KDQAVENILV  
 SPVVVASSLG LVSLGGKATT ASQAKAVLSA  
 EQLRDEEVHA GLGELLRSLN NSTARNVTWK  
 LGSRLYGPSS VSFADDFVRS SKQHYNCEHS  
 KINFRDKRSA LQSINEWAAQ TTDGKLPEVT  
 KDVERTDGAL LVNAMFFKPH WDEKFHHKMV  
 DNRGFMVTRS YTVGVMMHR TGLYNYDDE  
 KEKLQIVEMP LAHKLSSLII LMPHHVEPLE  
 RLEKLLTKEQ LKIWMGKMQR KAVAIPLPKG  
 VVEVTHDLQK HLAGLGLTEA IDKNKADLSR  
 MSGKKDLYLA SVFHATAFEL DTDGNPFDQD  
 IYGREELRSP KLFYADHPFI FLVRDTQSGS  
 LLFIGRLVRP KGDKMRDEL.

### STORAGE AND STABILITY

Store at 4°C if entire vial will be used within 2-4 weeks. Store at or below -20°C for longer periods of time. Addition of a carrier protein (such as 0.1% HSA or BSA) is recommended for long-term storage.

*For in vitro investigational use only. Not for use in therapeutic or diagnostic procedures.*